

# DOCUMENT RESUME

ED 078 157

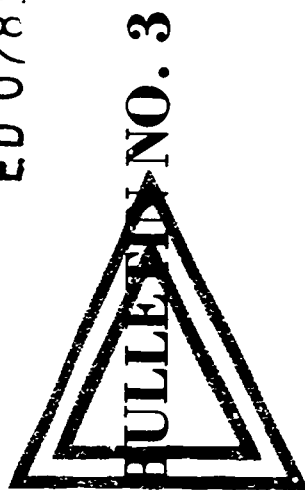
VT 020 320

AUTHOR Boggs, Lohnie J.; And Others  
TITLE Needed Research in Business Education.  
INSTITUTION Delta Pi Epsilon, St. Peter, Minn.  
PUB DATE Sep 72  
NOTE 21p.; Delta Pi Epsilon Research Bulletin No. 3  
  
EDRS PRICE MF-\$0.65 HC-\$3.29  
DESCRIPTORS \*Business Education; Business Subjects; Career Education; \*Curriculum Research; \*Educational Research; Federal Legislation; Leadership Training; Occupational Guidance; \*Research Needs; Student Characteristics; Teacher Education

## ABSTRACT

To identify areas of needed research in business education, Delta Pi Epsilon chapter presidents and sponsors were asked to review an earlier bulletin entitled "Questions to be Answered Through Research in Business Education" and restate questions which were still relevant, delete questions no longer relevant, and supply additional questions. These questions along with those supplied by the Delta Pi Epsilon National Research Projects Committee were compiled, reviewed, and rewritten to identify the most pressing research problems. The resulting 173 questions are organized in this bulletin according to these categories: (1) Adult Education Programs, (2) Articulation, (3) Basic Business and Economic Education, (4) Bookkeeping/Accounting, (5) Career Guidance, (6) Data Processing Education, (7) Distributive Education, (8) Evaluation and Measurement, (9) Federal Legislation, (10) Office Education, (11) Office Occupations, (12) Scheduling and Programming, (13) Shorthand and Transcription, (14) Student Characteristics, (15) Supervision and Leadership, (16) Teacher Education, and (17) Typewriting. (SE)

ED 078157



DELTA PI EPSILON RESEARCH BULLETIN NO. 3

VT020320

U.S. DEPARTMENT OF HEALTH  
EDUCATION & WELFARE  
NATIONAL INSTITUTE OF  
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY.

# THE

## NEEDED RESEARCH IN BUSINESS EDUCATION

By

Research Projects Committee

Lohnie J. Boggs, Arizona State University,  
Tempe, Arizona

Robert S. Driska, Herbert H. Lehman College,  
New York, New York

Leona M. Gallion, Indiana State University,  
Terre Haute, Indiana

F. Wayne House, Kent State University,  
Kent, Ohio

Charles R. Hopkins, University of Minnesota,  
Minneapolis, Minnesota, Editor

September, 1972

## INTRODUCTION

The National Constitution of Delta Pi Epsilon specifies that one way in which the organization shall strive to improve business education is by fostering and encouraging appropriate research. This has been accomplished through a series of National Delta Pi Epsilon Research Conferences, as well as through the publication of Research Bulletins. The publication of Research Bulletin No. 3, Needed Research in Business Education, is another key effort in this area.

A great deal of research in business education has led to improved curriculum practices and classroom teaching procedures. However, during a period of rapid change in business and education with an increased emphasis on accountability, sound research in business education is still needed. This Bulletin is an attempt to identify some of this research. Business educators, however, should not limit their investigations to only the topics included in this Bulletin. The Bulletin should also be used as a mechanism for generating additional research.

Data for inclusion in the Bulletin were gathered as follows: Letters were sent to chapter presidents and chapter sponsors asking each chapter to review the topics included in its assigned section of Research Bulletin No. 1, Questions to be Answered Through Research in Business Education. Each chapter was asked to restate questions which were still relevant, delete questions which were no longer applicable, and to supply additional questions. The members of the Delta Pi Epsilon National Research Projects Committee reviewed Research Bulletin No. 1. In addition, the Research Projects Committee members added sections and topics which were not included in Research Bulletin No. 1.

The data were compiled, reviewed, and rewritten several times by the Research Projects Committee until it was satisfied that the most pressing problems were included in Research Bulletin No. 3. The Committee did not attempt to prepare an exhaustive list of needed research. The members of the Committee recognized that there are many ways to design a research study; therefore, many topics were stated broadly with no attempt made to indicate design or level of investigation. Furthermore, topics listed under one section may be applicable to other sections.

The Research Project Committee hopes that the ideas presented in this Bulletin will stimulate business education research. Individually, business educators might investigate ideas as part of their graduate or independent study. Collectively, Delta Pi Epsilon Chapters or other interested groups might investigate ideas in which the entire membership could participate or in which several groups could cooperate in seeking answers to problems in business education.

Recognition is given to the members of the Committee on Research which developed Delta Pi Epsilon Research Bulletin No. 1, Questions to be Answered Through Research in Business Education: Russell J. Hosler, Mary Ellen Oliverio, George Wagoner, and Mildred Hillestad, Chairman. That Bulletin provided the framework within which Research Bulletin No. 3 was prepared. Appreciation is expressed to those chapters who provided suggestions for this Bulletin. A special thanks to Carol M. Harley, University of Minnesota, for her assistance in compiling data and typing preliminary drafts of the manuscript. Special thanks are also extended to Ellis J. Jones for his assistance in organizing Research Projects Committee meetings and in preparing final copy for the printer.

Members of the Research Projects Committee

Lohnie J. Boggs  
Robert S. Driska  
Leona M. Gallion  
F. Wayne House  
Charles R. Hopkins, Editor

## TABLE OF CONTENTS

Section	Items
Introduction	
A    Adult Education Programs . . . . .	1- 6
B    Articulation . . . . .	7- 11
C    Basic Business and Economic Education . . . . .	12- 21
D    Bookkeeping/Accounting . . . . .	22- 30
E    Career Guidance . . . . .	31- 44
F    Data Processing Education . . . . .	45- 54
G    Distributive Education . . . . .	55- 67
H    Evaluation and Measurement . . . . .	68- 76
I    Federal Legislation . . . . .	77- 86
J    Office Education . . . . .	87- 96
K    Office Occupations . . . . .	97-105
L    Scheduling and Programming . . . . .	106-116
M    Shorthand and Transcription . . . . .	117-127
N    Student Characteristics . . . . .	128-131
O    Supervision and Leadership . . . . .	132-138
P    Teacher Education . . . . .	139-151
Q    Typewriting . . . . .	152-161
R    Miscellaneous . . . . .	162-173

## NEEDED RESEARCH IN BUSINESS EDUCATION

### Section A. ADULT EDUCATION PROGRAMS

1. What are the characteristics of adult business education programs?
  - a. Availability of programs.
  - b. Effectiveness of methods and materials.
  - c. Objectives.
  - d. Standards.
  - e. Types and numbers of students enrolled.
  - f. Types of curricula offered.
2. How effective are on-the-job training methods when adapted to adult classroom use?
3. What is the role of business education in providing training programs for people re-entering the work world? For people upgrading business skills? For people retraining for new jobs because of technological changes?
4. What is the nature of training programs conducted by business for their own personnel?
  - a. Availability of programs.
  - b. Objectives.
  - c. Success of programs.
  - d. Teaching procedures.
  - e. Types of courses offered.
  - f. Types of personnel served.
5. What are the most effective methods and materials for re-developing "lost" skills for adults re-entering business?
6. What criteria are (should be) used in selecting, and what are (should be) the backgrounds of effective adult education instructors?

### Section B. ARTICULATION

7. To what extent do selected secondary school, area vocational-technical school, junior/community college, private business school and four-year collegiate business programs differ in the development of understandings, knowledges, and skills?
8. Develop and standardize a valid, reliable instrument by which placement of students could be made in business skills courses beyond the high school level.
9. Compare teaching methods, materials, and course content used in senior high school typewriting classes with those used in junior high school typing.

10. Determine effective ways to improve coordination and articulation between secondary school, area vocational-technical school, junior/community college, private business school, four-year collegiate, and/or adult business programs.
11. What are the problems encountered by students who transfer from one type of educational institution to another?

#### Section C. BASIC BUSINESS AND ECONOMIC EDUCATION

12. What economic understandings should students be expected to have upon completion of high school? How is the successful attainment of these understandings measured? (Has been researched but additional investigation is needed.)
13. What is the most effective curriculum pattern to facilitate the teaching of economic understandings in the secondary school?
14. What consumer behaviors should students be expected to exhibit upon completion of high school? How is attainment of these behaviors measured?
15. What role do attitudes play in the development of economic understandings?
16. Determine which methods and materials are more effective for developing economic concepts and understandings.
17. What are the differences between parents' and students' consumer knowledges and understandings? What factors (e.g. home, school, etc.) are most influential in developing consumer knowledges and understandings?
18. To what extent are supplemental learning materials used in basic business classes, and to what extent do such materials affect student outcomes?
19. What is (should be) the status of Business Law, Business Management, Business English, Business Mathematics, Introduction to Business, and Economic Geography at the secondary school level?
20. Develop an instrument, specifically for use at the secondary level, to measure economic knowledges and understandings. Compare students' economic knowledges and understandings before and after basic business courses. Compare economic knowledges and understandings of students who have and have not completed a basic business course. (Has been researched but additional investigation is needed.)
21. Through the use of the critical incidents procedure, identify teacher behaviors in basic business classes. Analyze the incidents to select those which differentiate "good" from "poor" basic business teachers.

#### Section D. BOOKKEEPING/ACCOUNTING

22. What types of jobs are available to students who have completed a one or two-year program in bookkeeping/accounting at the secondary level?
23. What bookkeeping/accounting skills, knowledges, and understandings are needed by:
  - a. The business student who is seeking employment in a bookkeeping/accounting position?
  - b. The business student who is not seeking employment in the bookkeeping/accounting area?
  - c. The non-business student?
24. To what extent are economic concepts needed to perform bookkeeping/accounting functions? To what extent are these taught in bookkeeping/accounting courses?
25. What changes should be made in bookkeeping/accounting courses to better meet the vocational needs of students?
26. Is there justification for and under what circumstances should a second year bookkeeping/accounting course be offered in high school?
27. Can (should) a systems approach to office education incorporate the development of bookkeeping/accounting competencies?
28. To what extent has electronic data processing affected bookkeeping/accounting procedures in business? In what ways can electronic data processing be integrated into bookkeeping/accounting courses? To what extent have electronic data processing procedures been integrated into the content of current bookkeeping/accounting courses?
29. Determine the effectiveness of teaching bookkeeping/accounting using the following procedures.

a. Accounting laboratories.	g. Practice sets (long, short, totally).
b. Contingency contracting.	h. Programmed materials.
c. Exercises (used in different ways).	i. Television.
d. Flow charting.	j. Other visual presentation (slide-tape, film loops, transparencies, sound-on-slides).
e. Individualized learning.	
f. Interpretive approach.	
30. What provisions are (should be) made for the bookkeeping/accounting student in the cooperative office education course? In the model/simulated office course?

#### Section E. CAREER GUIDANCE

31. What progress is being made in the area of exploring, developing, testing, and using career guidance systems in the business classroom?
32. Have the career education exploratory classes in junior high school contributed to better placement of students in senior high school occupational preparation classes?
33. What is the role of business education in career education at the:
  - a. Elementary level.
  - b. Junior high school level.
  - c. Senior high school level.
  - d. Post-secondary level.
  - e. Adult level.
34. What types of office and distributive jobs are available to the lower-ability student (90 I.Q. or below) and what types of office and distributive jobs are available to the higher-ability students (120 I.Q. and above)?
35. Can creativity be measured? If so, how? What is the relationship between creativity and success on the job and in business and distributive education courses?
36. How do job satisfaction and job competence relate to office skills, ability, creativity, and/or personality characteristics? What are the implications of these for job preparation and placement?
37. What factors in the work situation affect attitudes and/or skills after a period of employment, e.g. 3 months, 6 months, 1 year?
38. What types of on-the-job problems do beginning office and distributive workers encounter?
39. What types of testing programs and counseling procedures are (should be) used to:
  - a. Assist slow/average/gifted students in determining realistic employment goals?
  - b. Motivate students of different abilities to enroll in business education courses?
40. How does the type of student counseling change under modular scheduling? Are counselors more available for students under the new scheduling system?
41. What kinds of measurement and evaluation procedures are utilized by guidance counselors to assist in the guidance of prospective business students? How successful are these procedures?

42. What is (should be) the role of the classroom business education teacher in guidance?
43. Conduct a follow-up study of high school business department dropouts.
44. Analyze the placement procedures used for business graduates at various levels.

#### Section F. DATA PROCESSING EDUCATION

45. What is the status of data processing education at each of the following educational levels:
  - a. Secondary school.
  - b. Area vocational-technical school.
  - c. Junior/community college.
  - d. Private business school.
  - e. Four-year college.
  - f. Adult education.
46. What data processing concepts are being (should be) introduced before senior high school?
47. What are the trends in the continued uses of unit record equipment in small, medium, and large size businesses? In the use of computers in small, medium, and large size businesses?
48. To what extent are business office operations automated? What type of preparation should be provided in high school business programs for these automated processes?
49. Are the number and types of office jobs after installation of electronic data processing or integrated data processing systems different from the number and types of office jobs existing before installation? If so, how?
50. What are the skills, knowledges, and understandings required for job entrance in the automated office? Are business programs in secondary schools, vocational-technical schools, junior/community colleges, private business schools, and four-year colleges graduating students effectively prepared for these office jobs?
51. What are anticipated needs for personnel in business to manage and operate new equipment that will be available in the next decade?
52. To what extent are small businesses turning to computer utility services for records maintenance? Will computer utility services better serve the needs of small businesses than small computers?
53. How much emphasis should be placed on automation and automated data processing procedures in high school business courses?

54. What efforts are made to retrain office personnel as installation of electronic data processing equipment changes office jobs?

#### Section G. DISTRIBUTIVE EDUCATION

55. To what extent do distributive education students pursue a career for which they have been prepared?
56. Are there differences in employability, job competence, and job satisfaction among students who have completed.
- A cooperative education experience?
  - A project method experience?
  - A simulated (model store) experience?
57. What are the similarities and differences in characteristics of distributive workers in the upper or lower job rating quartiles?
58. Is there an effect on production, morale, and other factors in businesses which have modified employment standards to provide initial employment opportunities in distributive occupations to disadvantaged persons?
59. Develop criteria and guidelines for creating, selecting, utilizing, and evaluating instructional materials, media, and techniques to match selected learning needs in the distributive education classroom.
60. Through the use of a longitudinal study (5-10 years) compare the characteristics of "successful" and "unsuccessful" distributive education students to determine patterns of success (salary, advancement, etc.) on the job.
61. How successful are secondary school distributive education students who go to junior and four-year colleges?
62. To what extent is student learning in high school distributive education programs affected by:
- Integration of DECA youth organization activities?
  - Parental attitude?
  - Parental interest?
  - Student ability?
  - Student attitude?
  - Student interest?
63. How are distributive education programs providing occupational education for disadvantaged students?
64. To what extent do cooperative education, project plan, and model store learning experiences in distributive education enable students to meet performance goals in given distributive occupation clusters?

65. Identify the critical qualities of distributive education teacher-coordinators.
66. What are the characteristics of persons successful in distributive occupations which might be revealed by:
  - a. Case studies of successful and unsuccessful distributive personnel with essentially the same experience and preparation?
  - b. Critical incidents study of distributive personnel?
67. What are the differences in attitudes, job satisfaction, and job competence among sales persons?

#### Section H. EVALUATION AND MEASUREMENT

68. Develop reliable and valid scales to measure attitudes toward:
  - a. Advertising practices.
  - b. Business.
  - c. Business ethics.
  - d. Ecology.
  - e. Money-management problems.
  - f. Work.
69. Study the validity, reliability, and uses of office employment tests and their applicability in the classroom, e.g. civil service tests, company tests.
70. Develop an instrument to measure the effectiveness of multi-media instructional materials, models, dialogues, and gaming and simulation in the learning process.
71. Measure the transfer of learning in business subjects via followup studies from school to employment.
72. Develop predictive indices of success for use in advising students entering business programs.
73. Determine the degree and kind of mathematical concepts and understandings needed by business students at all educational levels as they enter the world of work.
74. Study the validity and reliability of achievement tests for student selection and placement in business classes.
75. Study the validity and reliability of teacher prepared terminal achievement tests in business classes.
76. Compare the results on achievement tests in business classes with mastery of behavioral objectives.

### Section I. FEDERAL LEGISLATION

77. To what extent has federal funding of office education programs expanded business and office education at various educational levels?
78. To what extent have students of lower ability entered and advanced in office and distributive occupations as a result of federal legislation?
79. To what extent has provision been made for disadvantaged students in regularly reimbursed office and distributive education programs?
80. What are the differences in characteristics of reimbursed and non-reimbursed courses and/or programs with similar objectives?
81. What are the values and outcomes of student participation in a vocational youth organization?
82. What are the comparative costs and benefits of reimbursed private school and public school programs with similar objectives?
83. What kinds of programs or activities have been funded for business and distributive educators through Educational Professional Development Act funds, and what have been the results?
84. What are the attitudes of vocational program instructors, vocational coordinators, local program directors, and administrators toward state and federal reimbursements?
85. Determine what prerequisites are (should be) established for admission into reimbursed vocational programs.
86. Investigate curricular influences of advisory committees in office education and distributive education.

### Section J. OFFICE EDUCATION

87. What are (should be) the results of the office procedures, co-operative office education, model/simulated/block and senior intensified courses in terms of beginning office employees?
  - a. Ability to adjust.
  - b. Ability to cope.
  - c. Ability to obtain employment.
  - d. Attitudes toward work.
  - e. Human relations.
  - f. Job competence.
  - g. Job satisfaction.
  - h. Promotions.
  - i. Skills.
  - j. Type of initial employment.
  - k. Other.

88. How do the office procedures, cooperative office education, model/simulated/block, and senior intensified courses compare in terms of cost, time, results, types of students, content, and/or activities?
89. What are (should be) the criteria for entry into office procedures, cooperative office education, model/simulated/block, and senior intensified course?
90. Should the length of time spent on the job and the types of jobs in which cooperative office education students are placed vary according to certain identifying characteristics?
  - a. Cultural differences.
  - b. Grade point average.
  - c. Personality rating.
  - d. Skills.
  - e. Socio-economic background.
  - f. Other.
91. What are (should be) the objectives and course content of the "related class" in cooperative office education?
92. What is the most effective time arrangement, e.g. one hour per day for one year; two hours per day for one semester; two hours per day for one year for the model/simulated/block course?
93. Are students who have completed a model/simulated/block course more successful in the cooperative office education program than students who have not?
94. What is the status of model/simulated/block courses at various educational levels?
95. What is the most effective time, e.g. at the beginning of the course, after one quarter of instruction, etc. to begin the simulation process in model/simulated/block courses?
96. What individualized instruction methods and materials are most effective in office education classes?

#### Section K. OFFICE OCCUPATIONS

97. What skills and knowledges, other than basic typewriting skills, are needed to operate modern-day office machines?
98. Study and compare records management systems used in business to determine implications for business courses.
99. Compare differences between individuals who are successful and those who are unsuccessful on the Certified Professional Secretary examination.
100. Compare differences between individuals who are successful and those who are unsuccessful on the Certified Data Processor examination.

101. What are the similarities and differences in characteristics of office workers in upper or lower job rating quartiles?
102. What office occupational opportunities are available? What is the entry level of training necessary for each? What geographic areas show the greatest potential for employment in office occupations in the coming decade?
103. What has been and what will be the impact of technology on office operations?
104. What are the issues and trends in contemporary office administration?
105. What is the effect on production, morale, and other factors in selected offices with modified employment standards which provide employment to individuals from groups which have experienced employment discrimination?

#### Section L. SCHEDULING AND PROGRAMMING

106. What changes are necessary in the business department to facilitate modular scheduling in terms of:
  - a. Curriculum?
  - b. In-class activities?
  - c. Materials?
  - d. Methods?
  - e. Objectives?
107. Compare modular scheduling with the traditional method of instruction in terms of:
  - a. Attendance at extracurricular activities.
  - b. Business teacher preparation and load requirements.
  - c. Facilitation of learning by varying modular sizes.
  - d. Meeting individual differences.
  - e. Number and type of student working materials.
  - f. Teaching results.
108. What are the major problems in modular scheduling for business education? How can these problems be solved?
109. What types of scheduling variations in the modular scheduling program are best suited for the skills subjects? For the basic business subjects?
110. Can modular scheduling be utilized in business education departments when other departments are using traditional scheduling? If so, how?

111. How does the scheduling (number and length of modules) of skill and non-skill classes affect student performance? How does the time the module is scheduled affect performance, e.g. early morning, late afternoon?
112. What is the optimum number of students for each module in discussion-type classes? In skill-development classes?
113. How does the availability of a student resource center affect student progress? What types of resource centers are preferable for business classes?
114. What preparation is needed by business teachers and administrators before they begin participating in a modular scheduled program?
115. How do business students and teachers utilize unscheduled time in schools using modular scheduling?
116. What preparation (e.g. budgeting of time and use of special resources) is needed by business students before they begin participating in a modular scheduled program?

#### Section M. SHORTHAND AND TRANSCRIPTION

117. What is the effect of using a controlled reader to develop shorthand reading fluency and transcription speed and accuracy?
118. Compare the relative effectiveness of the different shorthand systems in terms of learning difficulty, speeds attained, and ease and accuracy of transcription.
119. Compare the effectiveness of various types of homework practice procedures.
120. Compare the effectiveness of using programmed materials in shorthand and/or transcription with using traditional materials. (Has been researched but additional investigation is needed.)
121. Do shorthand students write at higher speeds and transcribe faster and more accurately when a knowledge of shorthand theory is required and tested than when a knowledge of shorthand theory is not required and tested?
122. Compare the effectiveness of the ways of teaching shorthand vocabulary.
123. Compare the relative effectiveness of the various speed dictation plans in achievement of a specific shorthand writing speed goal (e.g., 100 wpm).

124. What are the differences in English skills exhibited by students completing two years of shorthand, one year of shorthand, no shorthand?
125. Compare the materials dictated in business with materials in shorthand texts.
126. Compare the effectiveness of using various multi-media materials in the teaching of shorthand and transcription.
127. Compare the number and types of transcription errors made in short business letters dictated at 80 words per minute with the number and types of transcription errors made in short business letters dictated at 120 words per minute.

#### Section N. STUDENT CHARACTERISTICS

128. What are the characteristics used to classify and the procedures used to identify students as:
  - a. Academically handicapped (slow learner).
  - b. Academically talented (gifted).
  - c. Culturally different.
  - d. Disadvantaged.
  - e. Emotionally handicapped.
  - f. Low achiever (underachiever).
  - g. Physically handicapped.
129. What is the relative effectiveness of the various learning methods, materials, and/or models used to provide for the special needs and abilities of business education students?
 

<ol style="list-style-type: none"> <li>a. Audio-visual materials.</li> <li>b. Contingency contracting.</li> <li>c. Decelerated/accelerated courses.</li> <li>d. Independent study.</li> <li>e. Learning packets.</li> </ol>	<ol style="list-style-type: none"> <li>f. Mini-courses.</li> <li>g. Programmed instruction units.</li> <li>h. Remedial courses.</li> <li>i. Supplemental materials.</li> <li>j. Tutorial.</li> </ol>
---	--
130. What is the role and responsibility of the business teacher in identifying and treating student learning deficiencies? (e.g. reading, spelling, punctuation, grammar usage, arithmetic, etc.)
131. How effective are short-term, accelerated, or combination courses in developing job skills? (e.g. one-semester typewriting, one-year personal typewriting and personal shorthand.)

#### Section O. SUPERVISION AND LEADERSHIP

132. What are the differences in the services provided by state department of education personnel to funded (reimbursed) and non-funded (non-reimbursed) business education programs among the different states?
133. What efforts are being made by state department of education personnel to improve basic business and economic education?
134. In what areas do business and distributive education teachers feel there is a lack of leadership from state departments of education?
135. What are (should be) the characteristics of and qualifications for state supervisors of business and distributive education? For city supervisors (consultants)? For department chairmen?
136. What are (should be) the types of services (e.g., workshops, curriculum materials, curriculum change, program review, etc.) provided by business and distributive education state supervisors and their staffs? By city supervisors (consultants)? By department chairmen?
137. What role do (should) state supervisors play in determining business and distributive education teacher certification requirements?
138. What are (should be) the responsibilities of state supervisors? City supervisors (consultants)? Department chairmen?

#### Section P. TEACHER EDUCATION

139. What preparation is needed to acquaint business teachers with methods of working with and using paraprofessionals, teacher aides, clerical aides, and other supportive staff?
140. What types of inservice education are needed to improve teaching competencies?
141. To what extent does related work experience of the business teacher influence classroom activities (e.g. materials, illustrations, etc.)?
142. Should there be separate requirements for the certification of "vocational" business teachers as compared to business teachers in general? Do requirements for vocational certification actually relate to classroom instruction in vocational subjects?

143. What is the relationship between business teacher effectiveness and:
  - a. Amount of related work experience?
  - b. Frequency of work experience?
  - c. Job performance?
  - d. Recency of work experience?
  - e. Type of related work experience?
144. Is a planned, systematic, related work experience program more effective than an unstructured program? What kinds of experiences might prove effective in lieu of actual employment in a related job? How does one equate in-school supervised work experience with regular full-time employment?
145. What are the differences in the characteristics of successful business teachers at the secondary school, area vocational-technical school, junior/community college, four-year college, and adult education levels?
146. What should be the differences in programs preparing teachers for each of the educational levels?
147. What is the relationship among methods instructors, cooperating teachers, university supervisors, and student teachers as to:
 

a. Classroom activities.	e. Professional attitude.
b. Guidance of students.	f. Skills.
c. Knowledge.	g. Student evaluation.
d. Philosophy.	h. Understandings.
	i. Other.
148. Compare the effectiveness of various student teaching plans.
149. What special needs exist for teacher education programs for the urban business teacher? For the rural business teacher?
150. What type of college preparation should be provided to encourage classroom teachers to utilize and conduct research?
151. What preservice preparation should a business teacher have to work effectively with students in different ability groups? To work effectively with students who are considered disadvantaged?

#### Section Q. TYPEWRITING

152. What production rates should be established in typewriting classes on different types of problems to meet the standards of business?

153. What is the relative influence of various factors in production typewriting skills (e.g. scholastic ability, personality rating, decision-making ability, creativity rating, etc.)?
154. What is the effectiveness of large group instruction in teaching typewriting compared to small group instruction?
155. Through an observation of office work ascertain the typewriting activities performed on the job.
156. Investigate the effectiveness and value of teaching typewriting at the elementary, junior high school, and senior high school levels.
157. Compare the effectiveness of using programmed materials in teaching typewriting with teaching typewriting in a traditional manner. (Has been researched but additional investigation is needed.)
158. Compare the effectiveness of using various multi-media materials in the teaching of typewriting.
159. Survey the need for typewriting skills in the lower grades, especially as influenced by computer assisted instruction. What are the implications for equipment and instruction?
160. Compare the terminal achievement of students taught in classes where no straight copy timed writings are utilized with students taught in a typewriting classroom where timed writings are administered. (Has been researched but additional investigation is needed.)
161. Determine the relative effectiveness and appropriateness of materials used in senior high school typing classes composed of students with junior high typing background.

#### Section R. MISCELLANEOUS

162. What are the theories, skills, and knowledges related to attitude development? How can these be used in business courses by business teachers?
163. What is the "image" of business education at the various educational levels as perceived by the faculty, the administration, and/or the students?
164. How widely used is differentiated staffing in business education? What have been the results of differentiated staffing in business education?

165. How do the programs, teachers, and students in business programs in area vocational-technical schools differ from the programs, teachers, and students in programs in secondary schools? In junior/community colleges?
166. Are integrated programs in business machines and business arithmetic more effective than the traditional method of teaching business arithmetic and business machines in separate courses?
167. Upon completion of high school, how does achievement of business students in reading, spelling, arithmetic, and language usage compare with that of students in college preparatory programs?
168. What is the relative influence of such factors as teacher's mastery of subject matter, creativity, and attitude toward teaching on student achievement?
169. What are reasonable achievement levels for various kinds of students in business subjects after a semester, a year, and two years of instruction? How can these achievement levels be used as norms against which teaching can be measured so that teachers can be held accountable to students, to taxpayers, and to administrators?
170. Determine the need for business courses for out-of-school youth in selected school districts.
171. Are teachers able to recognize bias in educational materials?
172. In which areas are business internship programs worthwhile as a supplement to the formal education procedure?
173. Determine the need for an integrated "readings" program for business students at various educational levels.

DELTA PI EPSILON fraternity, founded in 1936, is an honorary graduate organization for men and women devoted to the advancement and professionalization of business education. Through its ideals of service, leadership and cooperation, the fraternity strives to make significant and unique contributions to professional growth and scholarly achievement in business education. In the words of its founder, Dr. Paul Lomax, can be seen the scope of the fraternity. "The professional interests of Delta Pi Epsilon encompass the whole of business education in relation to the entire fields of American business and American education. Its membership . . . must always think in terms of the common good and advancement of all our business teachers and of all students who pursue courses in business education."



#### CURRENT CHAPTERS:

ALPHA: New York University	ALPHA KAPPA: San Francisco State College
BETA: Oklahoma State University	ALPHA LAMBDA: Michigan State University
GAMMA: University of Pittsburgh	ALPHA MU: State University of New York (Albany)
DELTA: University of Cincinnati	ALPHA NU: University of North Dakota
EPSILON: Boston University	ALPHA XI: Hunter College of the City University of New York
ZETA: University of North Carolina at Greensboro	ALPHA OMICRON: University of California, Los Angeles
ETA: University of Denver	ALPHA PI: Wayne State University
THETA: Indiana University	ALPHA RHO: Fresno State College
IOTA: Syracuse University	ALPHA SIGMA: Arizona State University
KAPPA: University of Michigan	ALPHA TAU: University of Northern Iowa
LAMBDA: Northwestern University	ALPHA UPSILON: University of Nebraska
MU: University of Tennessee	ALPHA PHI: Northern Illinois University
NU: University of Kentucky	ALPHA CHI: Rider College
XI: University of Florida	ALPHA PSI: Mankato State College
OMICRON: University of Iowa	ALPHA OMEGA: Brigham Young University
PI: Ball State University	BETA ALPHA: Indiana University of Pennsylvania
RHO: Ohio State University	BETA BETA: Southern Illinois University of Edwardsville
SIGMA: University of Oklahoma	BETA GAMMA: Virginia Polytechnic Institute and State University
TAU: Columbia University	BETA DELTA: University of Georgia
UPSILON: University of Mississippi	BETA EPSILON: San Jose State College
PHI: University of Minnesota	BETA ZETA: Indiana State University
CHI: Pennsylvania State University	BETA ETA: Bowling Green State University
PSI: University of Southern California	BETA THETA: University of Wisconsin—Whitewater
OMEGA: George Peabody College for Teachers	BETA IOTA: Illinois State University (Normal)
ALPHA ALPHA: University of Northern Colorado	BETA KAPPA: Portland State University
ALPHA BETA: University of Illinois	BETA LAMBDA: Shippensburg State College
ALPHA GAMMA: University of Houston	BETA MU: Central Connecticut State College
ALPHA DELTA: Kansas State Teachers College (Emporia)	BETA NU: Utah State University
ALPHA EPSILON: North Texas State University	BETA XI: Memphis State University
ALPHA ZETA: Temple University	
ALPHA ETA: University of Wisconsin—Madison	
ALPHA THETA: University of Texas	
ALPHA IOTA: University of Colorado	

#### 1972-1973 National Executive Board:

EUGENE D. WYLLIE, President  
 GORDON F. CULVER, Vice-President  
 WANDA BLOCKHUS, Secretary  
 ROBERT A. RISTAU, Treasurer

FRANKLIN J. HANSEN, Historian  
 RAYMOND R. WHITE, Past President  
 Executive Secretary:  
 ELLIS J. JONES